

Abstract
ABSTRACT

The invention relates to a matched filter for implementing the correlation of an input signal and a reference signal. The matched filter according to the invention comprises N parallel M-sample long shift registers for receiving an equal

5 number of input signals at the sampling frequency of the input signal, wherein $N \geq 2$; first means for storing K M-sample long reference signals, wherein $K \geq 1$; multiplexing means for applying one input signal and one reference signal at a time from said shift registers and said storage means to correlation calculation means by applying alternately at least one combination of the input signals

10 and the reference signals to the calculation means; calculation means for calculating the correlation time-dividedly for each combination of an input signal and a reference signal so that correlation results calculated from different signals appear at the output of the calculation means as a sequence.

15 (Figure 6)